

percentage mark-up over the directly attributable forward-looking costs." *Id.* ¶ 696.

Ameritech proposes a combined mark-up of approximately 25% over TELRIC for shared and common costs. To arrive at that percentage, Ameritech hired Arthur Andersen, its financial accounting firm, to assemble a team of accountants that, in a month's time, sifted through Ameritech's internal budget to find the shared and common costs to be assigned to UNEs.

The AA Study methodology consisted of having Arthur Andersen employees conduct interviews with high level managers in certain business groups within Ameritech. The purpose of the interviews was to ascertain preliminary 1997 internal business budget costs that could be classified as shared costs or considered common costs. Once these two pools of costs were established, the AA Study then apportioned the costs first to all UNEs and then to each type of element to develop a fixed shared and common surcharge per element. The cost projections were done in 1996 as part of Ameritech's standard preliminary budgeting process, including "mapping out" employees and expenses by tiers for cost classification. The largest single Ameritech business entity interviewed (Network Services) did not have available 1997 projections in the lower tiers. To fill the gap, Arthur Andersen used information from 1996 budgets to construct the lower tiers and thus complete the cost allocations. Ameritech Indiana Exh. DPB-NP (Broadhurst Direct), pp. 7-8.

The Commission finds that several of the shared costs allocated to UNEs are unreasonable and in violation of the Act. The AA Study identified several million dollars worth of shared costs that were directly assigned to unbundled elements. The AA Study defined shared costs as costs "incurred to provide two or more UNEs but are unrelated to products and services that are not UNEs." Ameritech Indiana Exh. DPB-NP (Broadhurst Direct), p. 3. Approximately 40% of these shared costs came from the AIIIS business unit's 1997 budget. The greatest portion of this amount is for salaries, benefits and other employee related expenses for personnel who, Ameritech asserts, supply services *solely* for unbundled elements.

According to the AA Study, these employee-related expenses were developed by Ameritech personnel who "mapped out" employees by making headcount lists for each manager in the various sections of the AIIIS unit. The dollar budgets by management group and the assignment of costs directly to the unbundled elements were made by Ameritech personnel and then included in the AA Study following an interview with an Arthur Andersen employee. No in-depth independent reviews of the direct assignments, the dollars in the budgets or headcounts were conducted by the Arthur Andersen employees.

As pointed out by witnesses for the OUCC and intervenors, however, many of the AIIIS employees directly assigned to UNEs were not engaged in work activities solely related to UNEs. Thus, under Andersen's own definition of "shared costs," the wages for such employees were not shared costs to be directly assigned to UNEs.

MCI witness Dr. Ankum proposed several adjustments based on these misallocated salaries. Altogether, Dr. Ankum found that 23.36% of the wages from the AIIS business unit originally identified by Arthur Andersen were improperly assigned to UNEs and should be removed from the shared cost pool. MCI Exh. AHA-D (Ankum Direct), p. 137. He also recommended the Commission order Ameritech Indiana to back out the numerous ancillary costs attributable to these employees improperly designated to UNEs. These other costs include those employees' benefits, as well as the costs of providing their work space. *Id.* at pp.136-138. We find that Dr. Ankum's recommendations are reasonable and should be, and are, accepted.

Finally, the AIIS budget assigned an amount as a shared cost to unbundled elements for computer related expenses for new employees. AT&T/MCI witness Behounek recommended two adjustments to this amount. First, he recommended that the one-time software expenses be amortized over two years to reflect the expected economic life of software assets. Second, the Arthur Andersen workpapers reveal that these funds are directly related to the purchase of computers and software for all of the new AIIS employees, not just the new AIIS employees who are directly assigned to unbundled elements. Mr. Behounek thus recommended the assignment of only that percentage of AIIS employees identified in the AA Study workpapers as incremental to the UNE business of AIIS be assigned to the UNE shared cost pool. AT&T/MCI Joint Exh. 3.0P (Behounek Direct), p. 34. We agree with Mr. Behounek's analysis and, therefore, accept his recommendations.

The shared cost pool directly assigned to UNEs also includes more than \$4 million from Ameritech's Corporate business unit. This amount is the sum of the expenses directly assigned to UNEs from three departments within the Corporate department: the Corporate Strategy department, the Public Policy department and the Corporate Legal department. AT&T Cross Exhs. 8 and 17; Broadhurst Cross, Tr. G-101.

The Commission finds no support for the direct assignment as shared costs of these Corporate Strategy and Public Policy expenses. To the contrary, it appears that expenses related to matters other than unbundled network elements are included. For example, the Corporate Strategy department total includes expenses related to an employee whose time is "spent reviewing issues relating to resale and unbundling." MCI Exh. AHA-D (Ankum Direct), p. 138. According to Mr. Broadhurst's definition of a shared cost as one that is related to two or more UNEs but not related to services that are not UNEs, these costs should be excluded from the shared cost pool. Thus, for the reasons set forth in Dr. Ankum's testimony, we find that the Corporate Strategy and Public Policy expenses should be moved from the shared cost pool to the common cost pool, where they will be shared by all services, not just UNEs. *Id.*, p. 139.

A total of nearly \$4 million from the Corporate Legal department budget was directly assigned as a shared cost to UNEs. According to Mr. Broadhurst, an Ameritech employee, Mr. Carlson, was responsible for assigning these costs to UNEs. Broadhurst Cross, Tr. G-75 and 76. Mr. Carlson's deposition in Ohio, as well as the AA Study workpapers, indicated that these legal expenses represented Ameritech's counsel fees

related to “[a]rbitration [proceedings] and the statements of generally available terms and the tariff filings and the cost proceedings and the resulting litigation.” MCI Exh. AHA-D (Ankum Direct), pp. 138-140 and Attachment 3.

The Commission finds that the assignment of these Corporate Legal department expenses directly to UNEs is unreasonable. First, these expenses clearly are not “forward-looking.” For the most part, they represent one-time expenses related to initial implementation of the Act and are not likely to be incurred at this level in future years, as was pointed out by the witnesses for the OUCC, AT&T, and MCI. Second, such expenses do not fit Arthur Andersen’s own definition of shared costs. The arbitrations and cost proceedings embraced many issues unrelated to Ameritech’s provision of UNEs, including resale. We find that the Corporate Legal expenses should be excluded from the shared cost pool. Because these costs are not forward-looking and are one-time costs, we also find that such legal expenses should not be recovered as a part of the common costs allocated to UNEs.

The final business unit from which costs were directly assigned to UNEs as shared costs is the AOC/State Administration unit (referred to by Mr. Broadhurst as the Centralized Services in his written testimony). A total of more than \$7 million of this unit’s expenses were directly assigned to UNEs, derived from the Public Policy and the Legal departments. Ameritech Indiana Broadhurst Redirect Exh. 1; AT&T Cross Exhs. 15 and 17; Broadhurst Cross, Tr. G-101. The Public Policy department costs directly assigned to the UNEs includes forecasted amounts for the services of Arthur Andersen and the Law and Economics Group (Dr. Aron). These consultant services are one-time extraordinary expenses. As such, they are not forward-looking and should not serve as the basis for the recurring charge for shared costs. Accordingly, we find that such Public Policy department expenses should be removed from the shared cost pool.

The balance of Public Policy department costs directly assigned to unbundled elements are for wage and benefit costs. Arthur Andersen’s workpapers again revealed numerous examples of improper allocations. MCI Exh. AHA-D (Ankum Direct), pp. 144-45. In sum, the Commission finds that Ameritech has not made a convincing case that the Public Policy department costs are related solely to unbundled network elements, and we find that all of these costs should be removed from shared costs and instead included in the common cost pool.

The last item directly assigned to unbundled elements as shared costs from the AOC/State Administration business unit comes from projected costs from the Legal department. Ameritech Indiana Broadhurst Redirect Exh. 1; AT&T Cross Exhs. 12 and 17; Broadhurst Cross, Tr. G-102. The reasons against allocating these costs to shared costs assigned to UNEs are the same as for the Corporate Legal department, namely, the costs for implementing the Telecommunications Act are not forward-looking, are not likely to reoccur in future years and are not exclusively related to unbundled network elements. We find these costs also should be removed from both the shared cost pool and the common cost pool.

Many of the common costs assigned to UNEs are similarly unreasonable. The AA Study sifted through the multi-billion dollar Ameritech 1997 budget to identify a sizeable pool of common costs. Then, through a byzantine system of allocation ratios, the AA Study assigned some \$11 million of those common costs to unbundled network elements. An examination of the AA Study methodology reveals that the expenses included in the pool of common costs, as well as the allocation percentages used to apportion the common costs for assignment to UNEs, undermine the credibility of the Study. The result is an over-assignment of Ameritech's common costs to the unbundled elements.

AT&T/MCI pointed out several obvious examples of common costs that were inappropriately allocated to unbundled network elements. These include costs for the Ameritech Senior Golf Tournament, for skyboxes at various sporting arenas, for the Ameritech Cup and for the "In Performance at the White House." MCI Exh. AHA-D (Ankum Direct), pp. 150-151; AT&T Exh. 1.0P (Henson Direct), pp. 52-54. Ameritech also included some of their other corporate charitable contributions in the common cost pool. As was pointed out by AT&T witness Henson, "such retail-oriented activities are of no benefit to (and in many cases serve a purpose contrary to) the interest of new local service entrants." AT&T Exh. 1.0P (Henson Direct), p. 53. We agree and find that such costs should not be loaded into the prices of UNEs. Under Ind. Code 8-1-2-6(c), we could not permit Ameritech to recover such expenses in its retail rates. And, we do not believe Ameritech should be allowed to recover such image building advertising expenses and charitable contributions in its prices for UNEs. As Dr. Roycroft correctly points out, such expenses should be borne by Ameritech's shareholders, not its customers, regardless of whether they are retail or wholesale customers.

There is other demonstrable evidence that the AA Study failed to remove *all* of the retail-related costs. Dr. Ankum found an amount under the listing of PROCSOL VG2 for the retail expenses related to printing Ameritech's customer bills. Similarly, the listing ECS-AM VG3 contributed several million dollars in retail related expenses for the system that allows Ameritech to "establish, maintain and change customer account information." An item entitled BILLSOL VG6-7 is a cost relating to computer applications to allow Ameritech to bill retail customers for telephone usage. RAO VGC relates to correction of service order, toll usage and account errors and also handling of return mail, duplicate billing and special bill processing. Finally, Ameritech Indiana included expenses related to the management of remittance of its customer bill payment. MCI Exh. AHA-D (Ankum Direct), pp. 151-152. All of these items are exclusively retail-related expenses, and we find that they should not have been included in the common cost pool.

The primary reason that these various retail costs were not identified in the four business units which contributed common costs to the unbundled network elements is the method Ameritech used to identify costs to be directly assigned. The AA Study workpapers reveal that there is only one memorandum that was sent to Ameritech personnel requesting that they identify costs related to unbundled network elements to be used in the AA Study. See, AT&T Cross Exh. 11. That memorandum requested only

that unbundled element costs be identified and directly assigned. No effort was made to assign costs directly to any other business unit or activity. Unless the Ameritech employee volunteered that some costs should be directly assigned to another activity (which apparently never happened), the costs were left in the common cost pool and ultimately allocated to UNEs. Broadhurst Cross, Tr. G-82.

The Commission finds it difficult to discount AT&T and MCI's assertion that the allocation scheme used in the AA Study to assign common costs to the UNEs is discriminatory. Once it identified the pool of common costs, the AA Study then allocated those costs to all services, including unbundled network elements. The common costs were allocated through a series of six ratios, or allocators as they are called in the AA Study, and certain costs went through multiple allocations prior to being assigned to UNEs. Neither Ameritech nor Arthur Andersen offered an explanation as to why this byzantine system was presented in this case, other than it is the way Ameritech allocates costs for internal budgeting purposes.

Whether or not the AA Study allocation system for common costs is arbitrary, we find that it was applied in an unreasonably discriminatory manner. For example, the AA Study allocates *no* common costs to Ameritech's "new ventures," a series of non-regulated, retail business activities. Broadhurst Cross, Tr. H-9. The new ventures are "non-core" activities. Thus, excluding them in the allocation process decreased the ratio of "non-core" to "core" activities, an extremely important ratio used in allocating common costs from the Corporate business unit to AIS and then to unbundled network elements. If the new ventures were included, the "core/non-core" allocator would decrease the amount of common costs eventually allocated to unbundled network elements. Furthermore, the exclusion of new ventures from the common cost allocation scheme means that none of the salary of Ameritech's President, or the real estate costs, or the costs of the Ameritech Institute are allocated to new ventures, even though all unbundled network elements will bear part of those expenses.

The fact that the allocation system is not uniformly applied raises serious doubts about the fairness of the allocation scheme itself. When one starts to examine the results of the allocation process, it is clear that common costs are not shared evenly. For example, UNEs account for a fraction of the Ameritech Indiana's network costs, and yet Ameritech's overseas investments, which exceed total network costs by some sixty percent, were allocated less than half of the amount of Corporate common costs as UNEs. *Compare* AT&T Cross Exh. 29, p. 20 with AT&T/MCI Joint Exh. 3.0, BB-11.

Having determined fixed pools of costs, the AA Study then proceeded to distribute the pool of shared costs and the allocated share of common costs among the unbundled elements. While the FCC Order does not prescribe a set distribution method, the Order does approve the mark-up method. When using a mark-up method, no distribution mechanism is needed to spread the costs among the unbundled elements. The mark-up method is based on projecting how much cost per unit is needed to meet anticipated shared and common costs. Once a cost per unit is established, a percentage is then established, and that is charged to each unit. When using the mark-up method, the

number of units sold makes no difference, for each unit will pay the same, uniform mark-up. Thus, the demand for loops or other unbundled network elements has no effect on the mark-up method of assigning common and shared costs.

The AA Study follows a different design, however, which relies heavily on demand projections. Having developed the shared and common cost pools, the AA Study solves the distribution problem by dividing the forecasted pool of shared and common costs by the ratio of the extended TELRIC for the element to the extended TELRIC for all unbundled elements. The extended TELRIC for an element is its TELRIC times its projected demand. As pointed out by the AT&T/MCI witnesses, this distribution method makes the entire pricing structure critically dependent on the demand forecast for the unbundled elements. Thus, the single most important factor affecting the amount of shared or common costs charged to each unbundled element under the AA Study is the demand forecast. However, neither Ameritech nor Arthur Andersen produced the demand forecast in this proceeding. Ameritech witness Broadhurst simply stated that the projected 1997 demands for unbundled elements were provided to Arthur Andersen by Ameritech's product managers. Broadhurst Cross, Tr. H-46.

The Commission believes that Ameritech's allocation methodology can create a barrier to competition by unfairly increasing the assignment of shared and common costs by understating demand. With no demand study in the record, Ameritech has not met its burden of proof.

Ameritech's proposal also raises a rate discrimination issue. The AA Study sets forth a fixed price per loop for shared and common costs. For example, under the AA Study, the monthly price for all loops in Indiana (regardless of type or location) would include an amount for common costs and another amount for shared costs. The number Ameritech actually proposes is unclear, because the testimony of its witnesses Broadhurst and Palmer is contradictory. Mr. Broadhurst, the shared and common costs witness, testified that the lower numbers should be included in the monthly price for loops. Broadhurst Cross, Tr. H-52. Mr. Palmer, however, included the higher numbers in the revised loop prices he submitted with his rebuttal testimony. Ameritech Indiana Exh. NCP-R1. In any event, by charging fixed prices, Ameritech has set up an entry barrier before even the lowest cost loop can be purchased. Competition is likely to begin with the simple, low cost loops in urban areas. Placing a fixed shared and common cost rate of some \$3 on the low cost unbundled, urban loops results in a large increase in price and may halt competition in the very place where competition is most likely to originate.

In contrast, using the "mark-up over TELRIC pricing method" for assigning shared and common costs to loops, as advocated by AT&T/MCI witnesses, poses no entry barriers. The lower cost loops will receive only a proportionate percentage increase over the TELRIC price to cover the shared and common costs. Therefore, no fixed price barrier is erected.

For all of the reasons detailed above, we find that the AA Study does not present the Commission with a reliable, accurate and reasonable method to assign or allocate

shared and common costs to unbundled network elements.

AT&T/MCI witness Mr. Behounek and MCI witness Dr. Ankum, along with AT&T witness Mr. Henson, attempted to correct the methodological flaws in the AA Study to bring it closer to compliance with the Act and the FCC Order. The net result of Mr. Behounek's study was a combined mark-up of 12.2812% for both shared and common costs. AT&T/MCI Joint Exh. 3.0 (Behounek Direct), pp. 36-38 and Exh. BB-06. Mr. Henson's study suggested a 13.0% mark-up over the TELRIC to provide Ameritech with an appropriate contribution from UNEs for its shared and common costs. AT&T Exh. 1.0P (Henson Direct), p. 59. Dr. Ankum recommended a total shared and common cost mark-up of 12.94%. MCI Exh. AHA-D (Ankum Direct), p. 159. We found Dr. Ankum's approach to be the most reasonable in all respects save one: his proposal to reduce Ameritech's mark-up for common costs by 20%. Removing this reduction, the basis for which we find to be insufficient, yields a total shared and common cost mark-up of 14.93% above the TELRIC price, which percentage we find is the closest reliable approximation of shared and common costs Ameritech should incur providing UNEs on a forward-looking basis. *See id.* at 160. This mark-up shall be applied uniformly to all UNEs including unbundled loops.

#### **6. Non-Volume Sensitive Costs.**

Ameritech Indiana included within each of its TELRIC studies a separate, recurring rate for what it has termed "Non-Volume Sensitive" ("NVS") costs. In addition, in certain of its cost studies, Ameritech Indiana has included (1) non-recurring costs that fit the definition of NVS costs but are recovered as a separate one time charge applicable upon ordering of the affected elements rather than allocated monthly to individual unbundled elements and (2) recurring rates which include NVS-type, one-time implementation costs that are recovered as part of a recurring TELRIC.

**Ameritech.** As discussed above, Ameritech witness Broadhurst testified in his direct testimony that Arthur Andersen, in its analysis and review of Ameritech's TELRIC studies, assigned costs to seven categories. One of these categories was non-volume sensitive costs, which were not included in TELRIC studies of individual UNEs. Ameritech Indiana Exh. DPB-DN (Broadhurst Direct), p. 11. Mr. Broadhurst stated later in his testimony that these costs are primarily involved with up front network planning for the deployment of UNEs which had not been included in the TELRIC studies for UNEs. *Id.*, pp. 11-12. Further, he stated that these costs were added to the amounts derived in the TELRIC studies and were not included again as shared or common costs. *Id.* The activities underlying the NVS costs include developing flowcharts of UNE service order procedures; developing, planning and assisting in executing UNE integrated end to end testing; and leading re-engineering efforts to streamline the provisioning of UNEs.

**OUCC.** OUCC witness Dr. Roycroft criticized Ameritech's treatment of non-volume sensitive costs. First, Dr. Roycroft suggests that there is an inconsistency between the approach taken on non-volume sensitive costs by Mr. Broadhurst in his

shared and common cost study and Mr. Palmer in his TELRIC cost studies. Public Exh. 1 (Roycroft Direct), p. 37. He noted that both studies treat non-volume sensitive costs as direct costs that should be attributed to unbundled network elements. However, unlike Mr. Palmer's TELRIC study, which bases TELRIC on historical demand for all elements, Mr. Broadhurst's study allocates non-volume sensitive costs only to network elements that Ameritech forecasts will be purchased by new market entrants. *Id.* Dr. Roycroft recommends that, to the extent the Commission allows recovery of any non-volume sensitive costs, they should be recovered from all network elements.

Dr. Roycroft also takes issue with the nature of some of Ameritech's non-volume sensitive costs. He notes that, given the forward-looking nature of TELRIC cost studies, "extraordinary and non-recurring expenses should not be built into the study. As these expenses will not recur, their inclusion would result in an over-recovery." *Id.* Dr. Roycroft found several million dollars in costs that Mr. Broadhurst's own workpapers identified as "one-time planning and implementation costs" and "estimate[s] of incremental, planning and implementation costs related to unbundling," and recommended they be removed from the non-volume sensitive TELRIC amount found in Mr. Broadhurst's study. *Id.*, pp. 38-39.

**AT&T and MCI.** AT&T/MCI identified a number of concerns associated with Ameritech Indiana's proposed recovery of non-volume sensitive costs. First, AT&T and MCI argued that these non-volume sensitive costs are neither forward-looking nor incremental to the provision of specific unbundled network elements. AT&T/MCI Joint Initial Brief, § I.B.4; FCC Order ¶690. In other words, according to AT&T and MCI, many of the activities that make up the non-volume sensitive costs do not vary with the output of UNEs. Moreover, essentially agreeing with Dr. Roycroft's analysis, AT&T and MCI contend that these non-volume sensitive costs are being used to convert Ameritech Indiana's embedded network and, thus, do not relate to a forward-looking network design. *See* Palmer Cross, Tr. M-158. AT&T and MCI also questioned the manner in which the non-volume sensitive costs were calculated and were allocated among states and individual UNEs based on the same forecasted demand method Ameritech Indiana used in its shared and common cost analysis. MCI Exh. MS-D (Starkey Direct), pp. 23-24.

AT&T and MCI recommended that Ameritech Indiana be prohibited from recovering the identified non-volume sensitive costs. If these costs are to be recovered at all, however, AT&T and MCI contend they must be recovered in a competitively neutral fashion from all participants in the market place. AT&T Exh. 1.0P (Henson Direct), pp. 61-62; MCI Exh. MS-D (Starkey Direct), pp. 24-25 & n. 7. AT&T and MCI justify this proposal in a number of ways. First, they contend that to the extent that all customers participating in the local exchange market will benefit, or have the potential to benefit, these one-time expenses should be borne by all market place participants. Second, they note that service providers should participate in this cost recovery in a manner that relates to the quantities of elements that are used. Third, they conclude that to the extent one-time unbundling expenses provide benefits into the future, cost recovery should similarly follow. In other words, carriers entering the market now should not bear the majority of



the costs associated with unbundling, thereby allowing later entrants to avoid such costs. Finally, AT&T and MCI recommend that a true-up mechanism should be considered to assure that potentially inaccurate demand forecasts do not lead to an over or under recovery of non-volume sensitive costs.

**Commission Analysis and Conclusion.** Ameritech Indiana has identified costs it has incurred planning and implementing access to its unbundled network elements. While these may fairly be described as extraordinary and non-recurring, we agree with Ameritech Indiana that some provision for their recovery must be included in the prices we establish for UNEs. These costs, while outside the definition of TELRIC, are a type of shared cost, the recovery of which is appropriate under TA'96. And because we agree with Ameritech Indiana that these costs were "caused" as a result of its statutory requirement to provide UNEs to ALECs, we find that such costs should be assigned to UNEs, rather than also, as AT&T and MCI assert, to retail telephone customers. We also disagree with the assertions of the OUCC, AT&T and MCI that expenses that are extraordinary and that will not recur should not be allowed to be recovered on a recurring basis. Ameritech Indiana has proposed to spread the recovery of such costs over three years through a recurring charge based on its demand projections for UNEs. We find that the mechanism of a recurring charge for recovery of these costs is reasonable, and that the three-year limitation provides sufficient assurance against over-recovery.

#### **7. Non-recurring Charges.**

In determining at what price it will offer for resale by its competitors the individual components of its telephone network, Ameritech Indiana also seeks to include the cost associated with taking a competitor's order and implementing the transaction. Here again, the question is not whether such costs are properly included, for we agree with Ameritech Indiana that they are. Rather, our challenge is to review the evidence and ascertain as best we can the appropriate level for Ameritech Indiana's charges based on such costs.

The FCC's TELRIC methodology requires that all costs for unbundled network elements and interconnection services be determined based on least-cost, forward-looking technologies. Our measurement of the cost of the ordering processes that are part of offering unbundled network elements must similarly rely on least-cost, forward-looking technologies. One of the concerns expressed by witnesses for AT&T and MCI which we share is the extent to which Ameritech Indiana's cost studies include labor-intensive processes in the cost of processing CLEC orders for UNEs. Ameritech today has in operation an electronic data interchange interface which allows a UNE customer (that is, a CLEC) to enter the necessary order data directly into Ameritech's processing system, thereby reducing the necessity for more labor-intensive manual ordering processes. Looking ahead we find it is reasonable to expect more rather than less reliance on such automation.

Ameritech Indiana derived from its cost study three types of non-recurring charges

to compensate for the labor and other costs associated with its provision of UNEs: a service ordering charge, a line connection charge, and a service coordination fee. In our recent order pricing UNE's to be offered by another major Indiana incumbent LEC, GTE, we found that the long-run costs associated with electronic interfaces should be determined in a separate generic investigation to be initiated by the Commission and involving GTE and other such incumbent LECs. In the Matter of the Commission Investigation and Generic Proceeding on GTE's Rates for Interconnection... IURC Cause No. 40618 at p.45 (May 7, 1998). We now specifically find that Ameritech Indiana should be included in such an investigation for purposes of determining its costs to take service orders, make line connections, and coordinate the ALEC's commencement of service utilizing one or more of Ameritech Indiana's UNEs. In the interim, we determine the non-recurring charge for each of these services as follows:

a. Service Ordering Charge

The service ordering charge represents the cost to Ameritech of taking orders for UNEs, a process which Ameritech describes as involving "the intricate interplay between electronic interfaces and human personnel." Ameritech Indiana Proposed Order at 176; *see also* Ameritech Indiana Response to AT&T/MCI Proposed Order at 104. ALECs place their orders by means of Ameritech's ASR electronic interface, but Ameritech Indiana witness Palmer estimated that between fifty to seventy percent of such orders also require some degree of manual intervention. Based on its experience processing wholesale service orders at its AIIS customer service center in Milwaukee, Ameritech assigned ten minutes of labor time per service order, with an average order covering ten unbundled loops, and proposed to set the charge at \$14.57 per order.

AT&T and MCI contend that Ameritech's studies of non-recurring costs are based to too great a degree on manual processes for taking service orders and do not sufficiently reflect fully automated ordering capabilities. These intervenors allege that, as it has with other UNE cost components, Ameritech has provided insufficient substantiation. AT&T and MCI maintain that the lack of documentation makes it impossible to test the assumptions on which Ameritech based its estimates of the amount of labor involved in the underlying tasks. Among the various alternatives proposed by other parties, AT&T witness Henson recommended the service ordering charge be capped at five dollars, the same as the FCC allows ILECs to charge to change a customer's primary interexchange carrier (PIC). Henson Direct at 65.

While we agree that Ameritech's documentation is scant, and we suspect the ordering process is already more automated than at the time of Ameritech's cost study, we are also persuaded that some human intervention will continue to be necessary. We find Ameritech's estimation of an average of ten minutes of labor associated with each order to be reasonable, and we accordingly approve its proposed service ordering charge of \$14.57.

b. Line Connection Charge

Once the order has been placed, Ameritech personnel are also involved in establishing or reconfiguring the line connection. This is accomplished by means of a "cutover," the coordination of which Ameritech asserts requires 23 minutes of labor. Of the \$42.41 it proposes to charge for connecting a line, \$15.84 is attributable to labor. AT&T and MCI, however, opine that from a least-cost, forward looking perspective, manual coordination of this process should be sharply reduced or eliminated by the ordering ALEC's ability to track the cutover through Ameritech's electronic interface. Rather than disallow the entire labor component proposed by Ameritech for inclusion in its line connection charge, AT&T/MCI recommend that we allow fifty percent of it, or \$7.92, thereby reducing the proposed line connection charge to \$34.49. We find that it is reasonable to expect the coordination of a cutover to require on average no more than 11.5 minutes of human involvement. We therefore find that Ameritech's line connection charge should not exceed \$34.49.

### c. Service Coordination Fee

The service coordination fee reflects "certain non-usage sensitive components of the costs of providing switch-based service," which Ameritech estimates to be \$0.91. MCI witness Ankum indicated that he did not object to such a fee so long as it was imposed only on a per ALEC basis per central office. MCI Exh. AHA-D at 51. Ameritech Indiana witness Palmer testified that that is in fact how it would apply its service coordination fee. Palmer Rebuttal at 37. Also, MCI witness Starkey identified several components of the service coordination cost study which duplicated expenses already included in Ameritech's loop and port billing cost study. Ameritech agreed that these should be corrected, *see, e.g.*, Response of Ameritech Indiana to AT&T/MCI Proposed Order at 108. We now find that Ameritech Indiana should recalculate its service coordination fee to remove those expenses also included in its loop and port billing studies.

### 8. Pole Attachments, Ducts, Conduit and Rights-of-Way Costs.

According to Ameritech Indiana witness Mr. Palmer, its cost study for pole attachments, ducts, and conduit is based on the formula for rate development prescribed by the FCC in Docket Nos. 96-181 and 86-212. Ameritech Indiana Exh. WCP-DP at 23. With respect to rights-of-way, he explained that Ameritech Indiana will develop costs on a case-by-case basis in accordance with Section 224(d) of the Act. No party has raised any basis for the Commission to depart from the methodology adopted by the FCC.

MCI witness Dr. Ankum contended that pole investments are non-volume sensitive costs that should be allocated between users of those facilities. MCI Exh. AHA-D at 27. Ameritech Indiana counters by arguing that its pole investment costs are volume sensitive, derived by dividing its pole investments by its investment in aerial cable and assigning a proportionate share of pole expenses to all services using aerial cable on a per foot basis. Ameritech Indiana Exh. WCP-RP at 23.

Subsequent to the conclusion of the hearings in this Cause, the FCC issued its

Pole Attachment Order, FCC 98-20 (CS Docket No. 97-151, issued February 6, 1998). In paragraph 7 and footnote 26 of that Order, the FCC indicated that the existing pole attachment rate methodology for cable services, as set forth at 47 I/S/C 224(d) and at 47 CFR 1, Subpart J, would also apply to providers of telecommunications services until February 8, 2001. We note that Ameritech Indiana is also subject to the provisions contained at paragraphs 1119-1240 of the FCC's August 8, 1996 First Report and Order. Based on the evidence before us, we are satisfied that Ameritech Indiana's proposal for recovering its costs for pole attachments, ducts, conduit and rights-of-way is consistent with the FCC's various prescripts.

## **9. Physical Collocation.**

Under section 251(c)(6) of TA'96, Ameritech must provide for either the physical or virtual collocation of competitors' equipment. In its TELRIC studies, Ameritech included costs for physical collocation, in which competitors locate in Ameritech's central offices some of their equipment necessary for interconnection or access to UNEs. The cost of such accommodation is among those costs for which the Act directs us to ensure Ameritech is compensated.

**Ameritech.** Ameritech's physical collocation TELRIC studies propose both recurring and non-recurring charges related to Ameritech's Central Office Interconnection Service ("ACOIS"). The proposed recurring rates include charges for rental of central office floor space ("CO Floor Space") in 100 square foot minimum increments. The proposed non-recurring charges include order charges, rates for central office build out ("COBO") for the transmission node enclosure, space reservation charges, and other miscellaneous non-recurring charges.

For its CO Floor Space charge, Ameritech has stated that for building space necessary to provision 100 square feet, a total of 200 square feet is required. Ameritech Indiana Exh. PFQ-RN (Quick Rebuttal), pp. 8-10. Ameritech witness Mr. Quick stated that in a typical central office, the equipment room in which the competitors' equipment would be physically collocated represents appropriately 75% of the total floor space of that central office, while the remaining 25% represents the support necessary for the equipment room. Thus, the amount of useable square footage would have to be one third again as large to account for this "support" space. Mr. Quick also asserted that to provide a collocater with 100 square feet of useable space in the equipment room required 150 square feet of space in the equipment room. Using 150 square feet as his new starting point, he testified that the gross amount of building space necessary to provision a net total of 100 square feet in an Ameritech central office is 200 square feet (150 is 75% of 200). *Id.*

According to Ameritech, the Central Office Build Out ("COBO") charge includes costs associated with engineering the accommodations for the collocater's equipment, configuring interior space, developing additional means of access into the building, and enhancing security. Ameritech stated that the total investment cost for 100 square feet of

net usable space would be \$167.00 per square foot times 200 square feet, or \$31,360.59. Ameritech Indiana Exhs. PFQ-RN (Quick Rebuttal), pp. 20-21; WCP-RN (Palmer Rebuttal), R-1, p. 5. Ameritech also charges a node enclosure charge to compensate Ameritech for costs associated with building and maintaining the actual collocation cage or enclosure to secure the customer's transmission node. The charge for this cage is \$4,545.49. *Id.*, p. 5.

Ameritech also proposed two one-time charges to recover administrative costs associated with its processing of collocation requests. Its witness Paul F. Quick described a service order charge based on four hours of labor for the seven steps involved in processing inquiries as to the availability of space in a central office for collocation. He also described a space reservation charge based on ten hours of labor tracking and logging requests for collocation space, examining the central office building to verify that the amount of requested space is available, checking and verifying space and documents and tracking all reservations. Ameritech Ex. PFQ-RP, p.22-24.

OUCC. The OUCC, by its witness Dr. Roycroft, criticized Ameritech's physical collocation cost studies as relying on "embedded cost methodology, rather than TELRIC methodology[.]" Public Exh. 1 (Roycroft Direct), p. 34. Specifically, Dr. Roycroft notes that in its calculation of the CO Floor Space charge, Ameritech grosses up the square footage required by 50 feet to account for the inefficiency of Ameritech's current central office design to accommodate multiple tenants. According to Dr. Roycroft, this would violate the forward looking design principles of TELRIC. In other words, according to Dr. Roycroft, a forward-looking central office would be designed for collocation and take advantage of appropriate design features to facilitate collocating companies' needs.

Dr. Roycroft recommended that Ameritech resubmit a physical collocation study based upon a forward-looking central office building design. Alternatively, Dr. Roycroft suggests that the Commission should disallow the 50 additional square feet included in Ameritech's current physical collocation study.

AT&T and MCI. Similar to Dr. Roycroft, AT&T and MCI also complain that Ameritech's collocation prices are not forward-looking because they are based on Ameritech's current office deployment -- single-tenant central offices. AT&T/MCI Joint Initial Brief, § II.B.2.a. Indeed, they point out that Ameritech's collocation costs are not even specifically based upon Indiana data but are based upon national average data that could be as much as 10-years old. Quick Cross, Tr. D-19, D-30. It is likely, as AT&T and MCI suggest, that Ameritech has avoided considering a hypothetical multi-tenant office because such a forward-looking prospective would result in lower costs and lower prices. AT&T and MCI conclude that Ameritech's collocation prices are based upon embedded plant and must be rejected as not forward-looking.

AT&T and MCI also take issue with Ameritech's practice of "grossing up" the CO floor space by charging a price for 200 square feet of floor space when only 100 square feet of space is being provided to the collocator. They note that Ameritech performed no study to support its grossing-up practice. Quick Cross, Tr. D-36. AT&T and MCI further

contend that Ameritech's practice of doubling floor space does not account for the sharing of common space between the collocator and Ameritech or the collocator and other collocators.

Additionally, AT&T and MCI dispute Ameritech's conclusion that the high quality materials and construction methods used by Ameritech to build its central offices support Ameritech's selection of the 75th percentile -- the highest cost percentile -- and applying it to building construction cost data. AT&T/MCI Joint Initial Brief, § II.B.2. AT&T and MCI note that other than the assertions of its collocation witness Mr. Quick, Ameritech has put forth no support for this claim. Quick Cross, Tr. D-47 to D-48. Thus, AT&T and MCI conclude that Ameritech has provided no reason for the Commission to believe that its central offices are constructed at a level of quality any different than any other ILEC's central offices.

AT&T and MCI jointly recommend that Ameritech's CO floor space charge be based on 100 square feet of space, and not 200; (ii) that Ameritech's CO floor space charge reflect Medium Cost Central Offices; and (iii) that the monthly CO space charge should be recalculated based on the annual charge factors supported in the testimony of MCI witness Starkey. MCI Exhs. MS-D (Starkey Direct), pp. 15-16, pp. 6-8 & Sched. MS-1 (Corrected), p. 2. Mr. Starkey proposed price ceilings for all the physical collocation elements. His proposals are included in MCI Exh. MS-S (Starkey Supplemental), Attachment MS-5 (Revised).

As to Ameritech's COBO charge, MCI witness Dr. Ankum observed that all the modifications that Ameritech recovers by its COBO charge are already included in the per square foot investment cost identified by the Means Guides. MCI Exh. AHA-D (Ankum Direct), p. 81. Thus, AT&T and MCI argue that the COBO charge is superfluous and that the Commission should eliminate it in its entirety. AT&T and MCI also note that the COBO charge is based on backward-looking data because the starting point for Ameritech's COBO charge is its current single-tenant central office. AT&T and MCI also observe that many of the costs reflected in the COBO are already included in Ameritech's CO floor space charge. Finally, AT&T and MCI contend that if the Commission should require Ameritech to recover legitimate build out costs, it should be done on a recurring charge rather than an up-front one time charge. Such a recurring charge would more appropriately reflect the use that each collocator receives from the collocation space. *Id.*, pp. 88-9.

As to Ameritech's transmission node enclosure charge, AT&T and MCI urge that it should be reconstructed. AT&T and MCI note that Ameritech's method of calculating a Net Present Value for the transmission node enclosure is a mathematical impossibility: the initial investment is first identified and then a Net Present Value calculation is done that results in a figure higher than the initial investment. MCI Exh. AHA-D (Ankum Direct), p. 90. MCI witness Mr. Starkey converted Ameritech's proposed transmission node enclosure charge into an allegedly more forward-looking recurring charge. See MCI Exhs. MS-D (Starkey Direct), p. 15 & MS-S (Starkey Supplemental), MS-1 (Corrected), p. 2.

Finally, AT&T and MCI allege that Ameritech's proposed charges inappropriately include labor time estimates related to space reservations, ordering, and cancellation charges. MCI Exh. AHA-D (Ankum Direct), p. 92. MCI witness Dr. Ankum recommended that space reservation and service ordering charges be based on one hour of labor time each, which he suggested is conservatively high since only the labor time involving an Ameritech representative being contacted should be included. Consistent with that recommendation, Mr. Starkey recalculated Ameritech's allegedly inflated space reservation and service ordering charges and arrived at a lower estimate of the forward-looking cost related to these tasks. MCI Exh. MS-S (Starkey Supplemental), MS-S (Corrected), p. 2.

**Commission Analysis and Conclusion.** As with each other section of this order, our challenge once again is to evaluate Ameritech's evidence of its costs to ensure that they are computed based on a forward-looking economic cost methodology. The FCC specifically cautions against allowing incumbent LECs to recover costs "based on their existing operations" because the resulting prices could "reflect inefficient or obsolete network design and technology." FCC First Report and Order at ¶ 684. On the other hand, setting prices according to costs determined on the basis of "the most efficient network architecture, sizing, technology, and operating decisions that are operationally feasible and currently available to the industry" could "discourage facilities-based competition by new entrants because [they would be able to] use the incumbent LEC's existing network based on the cost of a hypothetical least-cost, most efficient network." *Id.* at ¶ 683. The FCC thus rejected the latter standard for being too hypothetical, and rejected the former for not being hypothetical enough. It attempted to resolve this tension by proposing a cost methodology which assumes "that wire centers will be placed at the incumbent LEC's current wire center locations, but that the reconstructed local network will employ the most efficient technology for reasonably foreseeable capacity requirements." *Id.* at ¶ 685; *see also id.* at ¶ 690.

We agree with the FCC that our charge is not to price a totally redesigned network, but to set prices based on the current network as if it were maximally efficient. In the context of collocation, we find that the prices Ameritech charges must be based on the most efficient central office configuration. The parties apparently do not dispute that the efficient central office in a competitive environment is designed to accommodate multiple tenants in addition to the incumbent LEC. The parties also agree that Ameritech's proposed charges for physical collocation are based on its current single tenant central office configuration. But while the OUCC and intervenors view this as a fatal flaw, *see, e.g.*, AT&T/MCI Initial Joint Brief at 89, Ameritech asserts that such rate design "reflects the best presently-available approximation of the total forward-looking costs that [it] would incur, if it built a multi-tenant central office today, with space already included and ready for occupancy by particular collocators." Ameritech Proposed Order at 163 (citing Ameritech Ex. PFQ-RP at 7).

What would be the cost of providing physical collocation in a hypothetical multi-tenant central office? We now review separately each of Ameritech's collocation charges:

### Central Office ("CO") Floor Space Charge

We agree with Ameritech's basic proposition that there is a distinction between the net amount of square footage available to a collocator and the gross amount of space necessary to make such net amount available. Charging collocators according to only the net amount of square footage used would not reflect the full cost to provide such space.

We also find that Ameritech may extrapolate from data from its current central office deployment to determine for a multi-tenant central office the percentage increase of net to arrive at a gross amount of square footage. We are not convinced, however, that Ameritech has proved that the gross amount is double the net amount. Rather, we find that the evidence supports increasing the net square footage by one third for purposes of calculating the gross square footage. That is, we can reasonably expect it to require 133 square feet of space in Ameritech's central office for Ameritech to be able to provide to a collocator 100 square feet of space in the the equipment room of that central office.

The Commission also finds that there is no basis to accept Ameritech's selecting the 75th percentile -- the highest cost percentile -- in applying the Building Construction Cost Data Guide. Ameritech's sole support for this claim is the opinion of its witness, Mr. Quick who admitted he had never even visited another ILEC's central office to examine its construction. No other support is offered for this claim. Essentially, Ameritech is asking the Commission to accept that Ameritech's central offices are constructed at a higher cost solely on the basis of Ameritech's *belief* that this is true. We find instead no reason to believe that Ameritech's central offices are constructed at a level of quality any different than any other RBOC's central offices. When questioned during hearing, Mr. Quick acknowledged he had no basis for comparing the construction quality of Ameritech central offices to that of other RBOC central offices and, therefore, could not conclude that such offices were constructed in a lower quality manner to that of Ameritech. Quick Cross, Tr. D-47 to D-48. Thus, Ameritech has not made any showing that Ameritech's central offices may properly be termed high cost. Accordingly, we agree with MCI's recommendation that Ameritech's CO floor space charge should reflect Medium-Cost Central Offices and not High-Cost Central Offices.

### COBO Charge

Ameritech seeks to recover through its Central Office Build Out ("COBO") charge additional costs it anticipates incurring in provisioning space for collocators. We find, however, that the COBO charge relies on an embedded cost approach, arising out of the additional requirements of reconfiguring space designed for use by a single tenant. Since the Means Guides investment figures which serve as the basis for the CO Floor charge should already identify the totality of all costs for a square foot of multi-tenant central office space, we find no basis for including additional costs related to the square footage demands of collocators.

¶ We note that collocators would and should be charged separately for such "build out" expenses as the transmission node enclosure, as well as for other equipment or services that Ameritech might provide, such as power, riser space, splices and entrance



facilities. See Ameritech Indiana Exh. WCP-RN (Palmer Direct), Exh. R-1, p. 5. Expenses for walls and doors, locks and keys, additional heating and ventilation and air-conditioning, reconditioning of floors, overhead lighting, BDFB, and the provision of AC power circuits in the customer's space, which Ameritech claims it is recovering via the COBO charge, however, are already identified by the Means Guides and included in the rental charges published. Accordingly, Ameritech is ordered to remove from its pricing the COBO charge.

#### **Transmission Node Enclosure Charge**

We find that Ameritech has also failed to support in a rational manner its proposed non-recurring charge for the transmission node enclosure (the wire cage which encloses the central office floor space). The most troubling aspect of the manner in which Ameritech calculates the node enclosure charge is Ameritech's use of a Net Present Value discount method. Ameritech's method of calculating a Net Present Value for the transmission node enclosure is a mathematical impossibility: the initial investment is first identified and then a time value of money calculation is done that results in a figure higher than the initial investment. Accordingly, we adopt the recalculated node enclosure charge proposed by MCI. See MCI Exh. MS-S (Starkey Supplemental), MS-1 (Corrected), p. 2.

#### **Other Physical Collocation Charges**

We find Ameritech has failed to prove the reasonableness of its proposed charges for space reservation and ordering. We specifically agree with AT&T/MCI witness Ankum that the number of labor hours attributed to these processes is inflated. Although Dr. Ankum recommended that each charge be based on no more than one hour of labor, we find that the service order charge should be based on no more than two hours of labor, and the space reservation charge should be based on no more than three hours.

### **10. Imputation.**

AT&T and MCI have recommended that we require an imputation standard for Ameritech's pricing of network elements. This Commission has previously required Ameritech to perform an imputation test to guard against a price squeeze for services classified as competitive, and which are comprised of one or more noncompetitive inputs. For example, we approved an Interim Imputation Policy in our June 30, 1994 Order in Cause No. 39705. As discussed below, however, we do not find that such a test is warranted in the instant cause.

**Ameritech and the OUCC.** Ameritech witness Dr. Aron testified that whether or not imputation might be appropriate in Indiana for Ameritech's retail prices, it was not appropriate to apply it to the company's UNE prices. Ameritech Indiana Exh. DJA-RN (Aron Rebuttal), p. 56. Specifically, Dr. Aron suggested that there were several safeguards present in the market that removed the need for an imputation test. For example, she stated that because Ameritech is required to resell its telecommunications services at wholesale, CLECs had an alternative strategy for market entry other than

through network elements. *Id.* p. 57. Further, Dr. Aron stated that any "problematic components" of Ameritech's retail rate structure could be overcome by CLECs providing enhanced or additional services to retail customers. *Id.* Lastly, Dr. Aron noted that antitrust laws also provide some protection against abuses of market power. *Id.*, p. 58. In its Exceptions to the AT&T/MCI Proposed Order the OUCC also discouraged our adoption of an imputation test at this time. OUCC Exceptions at 61-63.

AT&T/MCI. AT&T witness Dr. Ordoover discussed imputation at length in his testimony. He stated that imputation tests are designed to ensure that incumbents such as Ameritech are not able to use discriminatory pricing practices to squeeze their competitors from the market. AT&T Exh. 3.0 (Ordoover Direct), p. 35. As Dr. Ordoover explained, the internal price -- the so-called transfer price -- at which the monopoly supplier sells itself the input does not help in making such an assessment; it simply reflects a transfer from one of the seller's pockets to another, and cannot be used to compare the price at which the input is sold to other firms. *Id.* For this reason, Dr. Ordoover stated the relevant comparison is between the external price and the imputed price that the monopoly supplier charges itself. *Id.* This "imputed price" can be deduced from the final price of the end-user service that utilizes the input by subtracting the pertinent avoidable costs. The avoidable costs are those costs that the supplier of the input saves when it sells the input to the rival and forgoes the provision of the end-user service. *Id.*, pp. 35-6.

Dr. Ordoover believes that the risk of price discrimination is real when an ILEC both sells the UNEs to its rivals and also sells to end-users the services that utilize these unbundled elements. *Id.* He gave as an example the following scenario: when a TELRIC for an unbundled loop is \$16 per month while the retail price of the residential local access line is set at \$10 per month, a CLEC who purchases an unbundled loop for \$16 per month cannot compete with the ILEC for the provision of the service to residential customers. In this example, the imputation test would reveal that the ILEC "charges" itself at least six dollars less for the loop than it charges the competitor. This constitutes discrimination that renders the CLEC uncompetitive, unless it can obtain a six-dollar subsidy from some source. Thus, according to Dr. Ordoover, an imputation test can help to prevent "price squeeze" behavior by an ILEC.

AT&T witness Mr. Webber addressed one further point about an imputation test. He stated that in the case where the retail prices for services subject to imputation are low enough such that the test would not be passed if UNE prices were set equal to the price ceiling of TELRIC plus a shared and common cost mark-up, an alternative approach may be taken. AT&T Exh. 2.0 (Webber Direct), p. 21. He, therefore, made two recommendations should such an instance arise. First, he suggested that Ameritech could raise the rate of the retail service in question such that inputs priced at TELRIC plus the mark-up would not cause an imputation test to be failed. *Id.* Or, alternatively, Mr. Webber suggested that Ameritech could lower its imputed costs (UNE or interconnection prices) in order to pass. *Id.* Mr. Webber further suggested that the 13.0% shared and common cost mark-up described by Mr. Henson be reduced or eliminated where necessary to pass an imputation test. *Id.*, p. 22. However, he did not advocate that the

prices for UNEs and interconnection be set lower than TELRIC *Id.* Neither AT&T nor MCI advocated pricing UNEs below the TELRIC price floor.

**Commission Determination and Analysis.** In I.U.R.C. Cause No. 39705, the Commission approved an Interim Imputation Policy to prevent Ameritech Indiana from using the prices of its essential inputs to squeeze its competition out of the intraLATA toll market. Imputing charges in the local exchange market, however, differs considerably from imputing charges related to intraLATA toll service because the constituent elements of the local exchange tend not to be exclusive to that market. That is, the inputs to such an imputation test would necessarily also support services in other markets. The local loop, for example, is used to provide both local and long distance telephone service. Yet AT&T and MCI would have us assign 100% of the loop cost to local exchange service. While a decision on the apportionment of local loop is currently pending in I.U.R.C. Cause No. 40785, we cannot at this time find that for purposes of imputation it should all be assigned to the local exchange. While we recognize that in the retail market for UNEs a price squeeze could also result from pricing noncompetitive inputs at a level that does not allow an efficient competitor any margin with which to compete, we nevertheless decline at this time to apply an imputation test to Ameritech Indiana's provision of the unbundled network elements which comprise its local exchange telephone service.

#### **11. Residual "Costs".**

Although Ameritech utilized the UNE pricing methodology propounded by the FCC, it maintained that it was entitled under the Act to charge an additional amount. It has sought to allocate a portion of its residual "costs" (in addition to direct TELRIC, shared and common overhead costs) for unbundled loops in the event the FCC's Order was reversed on appeal by the Eighth Circuit Court of Appeals. Ameritech does not seek at this time to have its residual costs recovered for any other UNE in this proceeding. See Ameritech Indiana Exh. WCP-SN (Palmer Supplemental), p. 5. We have discussed previously above the Eighth Circuit ruling and its effect herein. For the reasons discussed below, Ameritech's proposal to recover its residual costs is rejected.

**Ameritech.** Ameritech's witness Mr. Palmer defined residual costs to be those costs associated with the difference between the "actual operations of a telecommunications provider and the forward-looking environment used in TELRIC studies." *Id.* He acknowledged that such costs include the "cost resulting from the difference in the network employed versus the idealized forward-looking technologies used in TELRIC analysis, actual versus target fill, and accounting depreciation lives versus forward-looking depreciation lives." *Id.*

According to Mr. Palmer, Ameritech focused its cost calculations related to the residual cost by assuming a "target" utilization factor when performing TELRIC studies as opposed to the "actual" utilization Ameritech Indiana currently is experiencing in its network. Using the target utilization as a starting point, Ameritech recalculated the TELRICs of unbundled loops by rate class and type of unbundled loop assuming actual

utilization. Ameritech held all other assumptions used in the target utilization TELRICs constant. Mr. Palmer stated that the difference between TELRICs calculated at target versus actual is the residual cost Ameritech incurs when providing unbundled loops and other services. *Id.*, p. 3. Dr. Aron posited that these residual costs should be recovered "to the extent that Ameritech Indiana's objective utilization is unrealistic or unobtainable." Ameritech Indiana Exh. DJA at 45.

**OUCC.** The OUCC's witness Dr. Roycroft stated that the residual cost approach used by Ameritech is inconsistent with the Act's provisions (§ 252(d)(1)) requiring costs to be calculated without regard to rate-of-return or rate-based proceedings. Public Exh. 1 (Roycroft Direct), p. 33. According to Dr. Roycroft, the "inclusion of residual costs will utilize historical utilization factors, rather than forward-looking utilization factors. As such, the costs developed will be akin to the historical costs used in a rate-based proceeding." *Id.* Dr. Roycroft encouraged the Commission to reject Ameritech's request for residual costs.

**AT&T/MCI.** AT&T and MCI objected to Ameritech's request for recovery of residual costs in Ameritech loop prices. Indeed, AT&T even objected to Ameritech's use of the term "cost" in relation to the residual. As explained by AT&T's witness Mr. Henson, because the residual is derived from total company revenues, excess earnings automatically become recategorized as "costs" under Ameritech's formulation. According to Mr. Henson, this flies in the face of any reasonable application of economic principles. Moreover, Mr. Henson pointed out that the return required to fully compensate investors for the use of their capital is already included in TSLRIC or TELRIC cost analyses. See AT&T Exh. 1.0P (Henson Direct), p. 68.

AT&T's economist Dr. Ordovery explained that the TELRIC methodology includes all of the costs related to providing a network element or other offering, and that, therefore, any recovery of a residual would be a windfall and a competitive advantage to Ameritech. As he explains it:

TELRIC is based on the entire demand of all uses and users of a network element or group. TELRIC includes the additional costs of serving the total demand of all uses and users of a network element (or group of network elements) sought by a requesting carrier, including the demand of the ILEC itself.

AT&T Exh. 3.0, p. 34. Dr. Ordovery joined Mr. Henson in concluding that the inclusion of residual costs in UNE prices would be fundamentally inconsistent with basic economic principles.

**Commission Analysis and Decision.** Ameritech Indiana faces a high hurdle in proving that its "residual costs" should be included in the calculation of UNE prices. According to TA '96, the just and reasonable rate for unbundled network elements must be "based upon the cost (determined without reference to a rate-of-return or other rate-

based proceeding) of providing...the network element...." 47 U.S.C.A. § 252(d)(1)(a). That Section does not countenance pricing in a manner that allows recovery of costs unrelated to the provision of a network element or other offering, and as we have already established, we can include only forward looking economic costs to arrive at just and reasonable UNE rates.

As an initial matter, we note that an essential tenet of forward looking economic cost pricing is the exclusion of historical or embedded costs. While it asserts that the residual costs it proposes to recover are neither historical nor embedded, Ameritech Indiana's description of such costs as "the difference between Ameritech Indiana's total 'revenue requirement' and the costs (incremental, shared and common) that have been identified and accounted for in Ameritech's TELRIC studies" suggests otherwise. See Ameritech Indiana Proposed Order at 181. Unlike under rate of return regulation, there is no "revenue requirement" independent from the forward looking economic cost of an unbundled network element. Ameritech Indiana's comparison of its TELRIC costs with its current revenue requirement is thus irrelevant.

The only question is whether Ameritech Indiana's TELRIC studies included all its forward looking economic costs to provide UNEs. Citing the gap between its current network utilization rate and the forward looking rate used in its TELRIC calculations, Ameritech Indiana asserts that TELRIC is an incomplete measure of what it costs the company to provide UNEs. Even assuming arguendo that Ameritech Indiana may reasonably anticipate lower actual utilization levels than TELRIC calls for, neither of the two distinct explanations it offers for this gap and its relevance to this proceeding is persuasive. First, the company suggests that its actual utilization level would be lower due to its ongoing retail service obligations as an ILEC. See *id.* at 182. We find, however, that any additional costs resulting from Ameritech Indiana's continuing retail service obligations should be attributed to its retail service customers rather than to purchasers of UNEs. The other basis on which Ameritech Indiana seeks to recover residual costs is that its TELRIC study insufficiently accounts for the "tendency of capacity to be added in discrete blocks rather than in a manner that matches the actual load growth." *Id.* at 185. Such "lumpiness" allegedly drives actual usage levels below the target. While we agree that the incremental nature of network capacity militates against setting a utilization target at 100%, that target is appreciably less than 100% in the instant case, and we see no reason to assume that lumpiness is already accounted for in the target utilization found in Ameritech Indiana's ACAR study that we determined above should be used in its TELRIC study. Either the utilization target is correctly set at an efficient level or not. We find it would defeat the purpose of this proceeding for us to allow Ameritech Indiana to include its residual costs in its loop pricing or in its pricing for any other unbundled network elements or other offerings.

## **12. Pricing for Combinations of Elements and Common Transport.**

AT&T and MCI claim that Ameritech has failed to provide pricing for combinations of unbundled network elements. AT&T also complains that Ameritech has

not provided pricing for common transport. In both these cases, AT&T points out that its Interconnection Agreement with Ameritech, which Agreement was approved by this Commission last year in Cause No. 40571-INT01, provides that combinations and common transport are to be available to AT&T.

#### Combinations

AT&T/MCI recommend that the prices for UNE combinations be set by adding the individual prices of the elements and subtracting the costs that would not occur because a new entrant is purchasing a package of elements, e.g., separate non-recurring charges, an individual network "protector" for both the loop and the port, etc. Ameritech witness Dr. Aron, however, described the recombination of unbundled network elements as "sham unbundling," in which a CLEC could piece together all of the elements necessary to sell a service at a price less than the tariff for that resold bundled service. Ameritech Indiana Exh. DJA-DP (Aron Direct), p. 28-29. In its brief filed in response to other parties' proposed orders, Time Warner also cautioned against allowing new entrants to resell complete services at TELRIC prices. Time Warner Post Hearing Brief at 7.

#### Common transport

As noted above, AT&T also complains that Ameritech has failed to provide cost information and pricing for common interoffice transport, notwithstanding the fact that the Interconnection Agreement between Ameritech and AT&T approved by this Commission on March 26, 1997, includes a common transport price.

The FCC Order requires "dedicated" and "shared" interoffice transmission facilities to be provided as UNEs. Dedicated transport provides an interoffice transmission facility that is dedicated to a single provider. The scope of shared transport, however, is interpreted differently by the parties. Ameritech defines shared as when two or more new entrants use the same interoffice transmission facility. However, AT&T and MCI argue that shared transport includes "common" transport, which would allow a CLEC to share the incumbent LEC's network with that incumbent LEC, in addition to other CLECs. Through such common transport a CLEC could terminate its customers' traffic anywhere on Ameritech's network without previously specifying the terminus. MCI Exh. AHA-D at 64. Ameritech's witness Mr. Klingerman recommended that the commission await FCC determination of whether common transport is an unbundled network element. Ameritech Indiana Exh. DLK-RN (Klingerman Rebuttal), p. 23.

Ameritech has argued to the FCC that common transport is a service, rather than an element, and should accordingly not be offered as a UNE. AT&T and MCI counter that such a narrow construct would keep new entrants from using the same facilities Ameritech uses to carry its traffic, effectively defining common transport out of existence as an unbundled network element.

**Commission Decision and Analysis.** This Commission has approved interconnection agreements which call for Ameritech to provide unbundled network elements as well as shared transport. Ameritech has voluntarily offered to include certain UNE combinations, but did not voluntarily agree to provide others. At the time these

disputes were arbitrated, this Commission followed the mandate of the FCC that ILECs such as Ameritech provide UNE combinations. The inclusion in an interconnection agreement of UNE combinations not voluntarily offered reflects this Commission's arbitration of interconnection disputes in accordance with the law as of the date of the arbitration order. The FCC's combinations rule, however, was subsequently struck down by the Eighth Circuit in the Iowa Utilities Board case previously mentioned. The court held that TA'96 did not provide a basis for state commissions to order ILECs to provide platforms of UNE combinations.

For purposes of this UNE pricing order, we find that Ameritech Indiana should provide prices for those combinations already included in its various interconnection agreements. The prices for such combinations should be determined by subtracting from the sum of the combined UNEs those UNE costs which are avoided by virtue of their purchase as a package.

With regard to what AT&T refers to as common transport, we agree with the FCC that shared transport as required by the Act "encompasses a facility that is shared by multiple carriers, including the incumbent LEC." FCC Third Order on Reconsideration, CC Docket Nos. 96-98 and 95-185, at ¶ 22 (issued August 18, 1997). We thus find that the definition of shared transport includes common transport as described above. Ameritech should provide cost studies and pricing for common transport.

**IT IS THEREFORE ORDERED BY THE INDIANA UTILITY  
REGULATORY COMMISSION that:**

1. Ameritech's proposed modifications of assumptions (cost of capital, depreciation lives, and fill factors) are rejected for the reasons set forth in Finding 4 above.
2. Ameritech is ordered to rerun its cost studies for interconnection and UNEs utilizing (i) the fill factor assumptions contained in Ameritech's Cost Analysis Resource manual, (ii) the 9.74 percent cost of capital, as determined herein, and (iii) the longest depreciation lives proposed by Ameritech Indiana for its plant and equipment, all in accordance with the findings set forth in this Order. The results of its rerun cost studies shall be submitted to the Commission within sixty days of the date of this Order.
3. Ameritech's shared and common cost study is rejected, and the Commission orders that Ameritech use a combined markup of 14.93 percent over TELRIC to recover its shared and common costs.
4. Ameritech shall modify its proposed non-recurring charges consistent with our findings in paragraph 7 above pending the outcome of the Commission's generic investigation of Ameritech's costs for operational support systems.

5. The physical collocation TELRIC-based rates as set forth in Finding 8 above are adopted.

6. The Commission rejects Ameritech's proposal for inclusion of residual "costs" in UNE prices.

7. Ameritech shall comply with all other findings set forth in this Order.

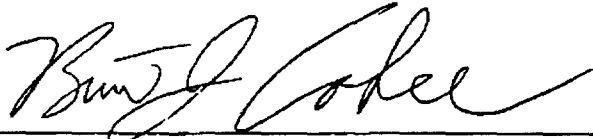
8. This Order shall be effective on and after the date of its approval.

**MCCARTY, KLEIN, SWANSON-HULL AND ZIEGNER CONCUR:**

**APPROVED:**

JUN 30 1998

I hereby certify that the above is a true and correct copy of the Order as approved.

A handwritten signature in dark ink, appearing to read "Brian J. Cohee", is written over a horizontal line.

Brian J. Cohee  
Executive Secretary